

REMARKS

An Information Disclosure Statement is submitted herewith.

In the Office Action dated April 7, 2004, claims 1-4, 13, and 17-19 were rejected under 35 U.S.C. § 102 over U.S. Patent Publication No. 2004/0062274 (Hakansson); and claims 30-35 were rejected under § 103 over Hakansson in view of U.S. Patent Publication No. 2001/0040883 (Chang).

Applicant acknowledges the indication that claims 5-12, 14-16, and 20-29 would be allowable if rewritten in independent form. Claims 5, 14, and 20 have been amended into independent form to place the claims in condition for allowance. The scope of claim 5 remains *unchanged*. The scope of claim 14 has been broadened by replacing the term “predetermined algorithms” at lines 14-15 and 17-18 with “at least one predetermined algorithm.” Claim 20 has been amended to change the “controller” clause to more clearly define the invention—however, it is respectfully submitted the scope of claim 20 has been broadened and that claim 20 remains allowable. Claims 5, 14, and 20 are therefore in condition for allowance.

It is respectfully submitted that claim 1 is not anticipated by Hakansson. Hakansson does not disclose interleaving *speech* data according to a first algorithm over plural frames for a first set of *speech* data, and interleaving *speech* data according to a *second* algorithm over plural frames for a second set of *speech* data. Hakansson describes a single interleaving scheme for speech data—diagonal interleaving. *See* Hakansson, ¶¶ [0011], [0018], [0021], [0057], [0064], Claim 2. In Hakansson, a different interleaving scheme is applied to certain SID frames (which cannot be considered speech data). Hakansson, ¶ [0027]. Thus, in Hakansson, only a single interleaving scheme (diagonal interleaving) is applied for speech data. Therefore, Hakansson does not disclose the subject matter of claim 1.

Independent claim 34 is similarly allowable over Hakansson. Although claim 34 was indicated by the Office Action as being obvious over Hakansson and Chang, the Office Action only cited to the teachings of Hakansson in the rejection against claim 34.

Independent claim 17 was also rejected as being anticipated by Hakansson. It is respectfully submitted that Hakansson does not disclose a controller adapted to process a first data frame n, n being an *even number*, from a half-rate mobile station interleaved

over plural bursts according to a first algorithm, and to process a second data frame $n + 1$, $n + 1$ being an *odd number*, from the half-rate mobile station interleaved over plural bursts according to a second algorithm. Hakansson describes use of block interleaving for certain SID frames, and use of diagonal interleaving for speech frames. However, Hakansson does not disclose a controller to process a first data frame n (n being an even number) according to a first algorithm, and to process a second data frame $n + 1$ ($n + 1$ being an odd number) according to a second algorithm. Therefore, claim 17 is not disclosed by Hakansson.

Independent claim 30 was rejected as being obvious over Hakansson and Chang. It is respectfully submitted that claim 30 is not obvious over Hakansson and Chang for at least the following reasons: (1) the references when combined do not teach or suggest the subject matter of claim 30; and (2) there is no motivation or suggestion to combine the references.

As conceded by the Office Action, the multiplexing feature of claim 30 is not disclosed by Hakansson. The Office Action relied, instead, upon Chang for this teaching. Applicant respectfully submits that Chang also does not disclose or suggest re-assigning a wireless channel portion to a second mobile station to enable multiplexing of traffic from a second mobile station onto the wireless channel portion while the first mobile station is in *discontinuous transmission mode, in response to detecting that the first mobile station has entered discontinuous transmission mode*. Although Chang describes the performance of statistical multiplexing, there is no teaching or suggestion whatsoever in Chang of performing the re-assigning of a wireless channel portion to a second mobile station *in response to detecting that the first mobile station has entered discontinuous transmission mode*. Therefore, even if Hakansson and Chang can be properly combined, the hypothetical combination of Hakansson and Chang does not teach or suggest *all* elements of claim 30.

Moreover, there simply is no motivation or suggestion to combine Hakansson and Chang in the manner proposed by the Office Action to achieve the claimed invention. Hakansson relates to an interleaving scheme applied to certain SID frames to improve efficiency. However, there does not appear to be any desirability whatsoever of modifying the system of Hakansson to incorporate the statistical multiplexing scheme of

Chang (which is applied on speech, not SID frames). It is well established law that “[t]he mere fact that the prior art could be so modified would not have made the modification **obvious** unless the prior art suggested the **desirability** of the modification. *In re Gordon*, 733 F.2d 900, 902, 221 U.S.P.Q. 1125 (Fed. Cir. 1984) (emphasis added). As the Federal Circuit has stated, “virtually all [inventions] are combinations of old elements.” *In re Rouffet*, 149 F.3d 1350, 1357, 47 U.S.P.Q.2d 1453 (Fed. Cir. 1998). “Most, if not all, inventions are combinations and mostly of old elements.” *Id.* “Therefore an examiner may often find every element of a claimed invention in the prior art. If identification of each claimed element in the prior art were sufficient to negate patentability, very few patents would ever issue. Furthermore, rejecting patents solely by finding prior art corollaries for the claimed elements would permit an examiner to use the claimed invention itself as a blueprint for piecing together elements in the prior art to defeat the patentability of the claimed invention. Such an approach would be ‘an illogical and inappropriate process by which to determine patentability.’” *Id.*

Here, there simply was no reason or desirability to incorporate the statistical multiplexing feature of Chang into the system of Hakansson. Claim 30 is not obvious over the asserted combination of Hakansson and Chang for this additional reason.

Independent claim 35 is not obvious over the asserted combination of Hakansson and Chang for similar reasons.

Dependent claims, including newly added dependent claims 36-41, are allowable for at least the same reasons as corresponding independent claims.

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In view of the foregoing, allowance of all claims is respectfully requested. The Commissioner is authorized to charge any additional fees and/or credit any overpayment to Deposit Account No. 20-1504 (NRT.0072US).

Respectfully submitted,

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